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			EXAMINER HO, CHUONG T	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/606,160	Applicant(s) WAN ET AL.	
	Examiner CHUONG T. HO	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-24 and 26-46 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-16, 19-24, 26-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The amendment filed 02/23/07 have been entered and made of record.
2. Applicant's arguments with respect to claims 1-6, 8-16, 17-18, 19-24, 26-46 have been considered but are moot in view of the new ground(s) of rejection.
3. Claims 1-6, 8-16, 17-18, 19-24, 26-46 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6, 8, 9, 19, 24, 26, 27, 37, 38, 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanchez et al. (U.S. Patent No. 2004/0090970 A1) in view of Kristofek (U.S. Patent No. 2004/0088735), and in further view of Daniel et al. (U.S. Patent No. 6,992,975).

In the claim 1, Sanchez et al. disclose a broadcast overlay network (ATM network) having a ring topology to carry broadcast (see figure 2A, [0039]) traffic from a head-end network; comprising:

A digital subscriber line access multiplexer (DSLAM) having a line interface and a network interface (see figure 3A, figure 4), the interface in communication with the broadcast overlay network (see [0042]), the DSLAM (see [0010]) adapted to receive a request for a particular video channel from a customer premise via the line interface,

and to deliver the particular video channel from the network interface to the line interface (see page 17, [0210], [0211]); wherein the DSLAM is further adapted to determine an available of the particular video channel based on a address provided by the request (see page 17, [0210], [0211]).

However, Sanchez is silent to disclosing a group address provided by the request. Kristofek discloses a group address provided by the request (see [0051]. Class D addresses) (see [0049] [0055], class D address).

Both Sanchez, and Kristofek disclose the IGMP. Kristofed recognizes a group address provided by the request. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Sanchez with the teaching of Kristofed to provide a group address provided by the request in order to provide multicast video over an ATM network.

However, the combined system (Sanchez – Kristofek) are silent to disclosing the ring topology including at least a first network ring and second network ring connected via at least one cross-connect element.

Daniel et al. discloses the ring topology including at least a first network ring (figure 2, ring A) and second network ring (figure 2, ring B) connected via at least one cross-connect element (figure 2, network element 31, figure 3A, cross-connect (XCON)) (col.2, lines 48-50, col. 3, lines 8-15);

The digital line access multiplexer (figure 2, network element 21) having a network interface, the network interface in communication with the broadcast (col.3, lines 49-50, broadcast) overlay network via the second network ring (figure 2, ring B).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the ring topology including at least a first network ring and second network ring connected via at least one cross-connect element taught by Daniel into the combined system (Sanchez – Kristofed). One would have been motivated to do so to reduce the cost of network by eliminating the need to provide a separate link.

5. In the claim 8, Sanchez et al. disclose a broadcast overlay network (ATM network) having a ring topology to carry broadcast (see figure 2A, [0039]) traffic from a head-end network; comprising:

A digital subscriber line access multiplexer (DSLAM) having a line interface and a network interface (see figure 3A, figure 4), the interface in communication with the broadcast overlay network (see [0042]), the DSLAM (see [0010]) adapted to receive a request for a particular video channel from a customer premise via the line interface, and to deliver the particular video channel from the network interface to the line interface (see page 17, [0210], [0211]); wherein the DSLAM is further adapted to determine an available of the particular video channel based on a address provided by the request (see page 17, [0210], [0211]).

However, Sanchez is silent to disclosing a class-D Internet Protocol (IP) address provided by the request.

Kristofek discloses a class-D Internet Protocol (IP) address provided by the request (see [0051]. Class D addresses) (see [0049] [0055], class D address).

Both Sanchez, and Kristofek disclose the IGMP. Kristofed recognizes a group address provided by the request. Thus, it would have been obvious to one of ordinary skill in the

art at the time of the invention to modify the system of Sanchez with the teaching of Kristofed to provide a group address provided by the request in order to provide multicast video over an ATM network.

However, the combined system (Sanchez – Kristofek) are silent to disclosing the ring topology including at least a first network ring and second network ring connected via at least one cross-connect element.

Daniel et al. discloses the ring topology including at least a first network ring (figure 2, ring A) and second network ring (figure 2, ring B) connected via at least one cross-connect element (figure 2, network element 31, figure 3A, cross-connect (XCON)) (col.2, lines 48-50, col. 3, lines 8-15);

The digital line access multiplexer (figure 2, network element 21) having a network interface, the network interface in communication with the broadcast (col.3, lines 49-50, broadcast) overlay network via the second network ring (figure 2, ring B).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the ring topology including at least a first network ring and second network ring connected via at least one cross-connect element taught by Daniel into the combined system (Sanchez – Kristofed). One would have been motivated to do so to reduce the cost of network by eliminating the need to provide a separate link.

6. In the claim 19, Sanchez et al. disclose a broadcast overlay network (ATM network) having a ring topology to carry broadcast (see figure 2A, [0039]) traffic from a head-end network; comprising:

Receiving, via a line interface of a digital subscriber line access multiplexer (DSLAM) (see [0010]), a request for particular video channel from a customer premise; receiving video content associated with the particular video channel from a video head-end at the DSLAM via a broadcast overlay network ([0042]) having a ring topology (see figure 3A, figure 4) ;

(see [0042]), the DSLAM (see [0010]) to receive a request for a particular video channel from a customer premise via the line interface, and to deliver the video content associated with the particular video channel from the network interface to the line interface of the DSLAM in communication with the broadcast overly network to the line interface (see page 17, [0210], [0211]); wherein the DSLAM is further to determine an available of the particular video channel based on a address provided by the request (see page 17, [0210], [0211]).

However, Sanchez is silent to disclosing a group address provided by the request.

Kristofek discloses a group address provided by the request (see [0051]. Class D addresses) (see [0049] [0055], class D address).

Both Sanchez, and Kristofek disclose the IGMP. Kristofed recognizes a group address provided by the request. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Sanchez with the teaching of Kristofed to provide a group address provided by the request in order to provide multicast video over an ATM network.

However, the combined system (Sanchez – Kristofek) are silent to disclosing the ring topology including at least a first network ring and second network ring connected via at least one cross-connect element.

Daniel et al. discloses the ring topology including at least a first network ring (figure 2, ring A) and second network ring (figure 2, ring B) connected via at least one cross-connect element (figure 2, network element 31, figure 3A, cross-connect (XCON)) (col.2, lines 48-50, col. 3, lines 8-15);

The digital line access multiplexer (figure 2, network element 21) having a network interface, the network interface in communication with the broadcast (col.3, lines 49-50, broadcast) overlay network via the second network ring (figure 2, ring B).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the ring topology including at least a first network ring and second network ring connected via at least one cross-connect element taught by Daniel into the combined system (Sanchez – Kristofed). One would have been motivated to do so to reduce the cost of network by eliminating the need to provide a separate link.

7. In the claim 26, Sanchez et al. disclose a broadcast overlay network (ATM network) having a ring topology to carry broadcast (see figure 2A, [0039]) traffic from a head-end network; comprising:

Receiving via a line interface of a digital subscriber line access multiplexer (DSLAM)

(see [0010]), a request for a particular video channel from a customer premise;

receiving video content associated with the particular video channel from a video head-

end at the DSLAM via a broadcast overlay network (see [0042]) having a ring topology (see figure 3A, figure 4);

Delivering the video content associated with the particular video channel from the network interface to the line interface (see page 17, [0210], [0211]); wherein the DSLAM is further to determine an available of the particular video channel based on a address provided by the request (see page 17, [0210], [0211]).

However, Sanchez is silent to disclosing a class-D Internet Protocol (IP) address provided by the request.

Kristofek discloses a class-D Internet Protocol (IP) address provided by the request (see [0051]. Class D addresses) (see [0049] [0055], class D address).

Both Sanchez, and Kristofek disclose the IGMP. Kristofed recognizes a group address provided by the request. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Sanchez with the teaching of Kristofed to provide a group address provided by the request in order to provide multicast video over an ATM network.

However, the combined system (Sanchez – Kristofek) are silent to disclosing the ring topology including at least a first network ring and second network ring connected via at least one cross-connect element.

Daniel et al. discloses the ring topology including at least a first network ring (figure 2, ring A) and second network ring (figure 2, ring B) connected via at least one cross-connect element (figure 2, network element 31, figure 3A, cross-connect (XCON)) (col.2, lines 48-50, col. 3, lines 8-15);

The digital line access multiplexer (figure 2, network element 21) having a network interface, the network interface in communication with the broadcast (col.3, lines 49-50, broadcast) overlay network via the second network ring (figure 2, ring B).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the ring topology including at least a first network ring and second network ring connected via at least one cross-connect element taught by Daniel into the combined system (Sanchez – Kristofed). One would have been motivated to do so to reduce the cost of network by eliminating the need to provide a separate link.

8. In the claim 6, Sanchez discloses the request comprises an Internet Group Management Protocol (IGMP) request message (see [0210]).

9. In the claim 9, Sanchez discloses the broadcast traffic comprises Internet Protocol (IP) multicast envelopes (see page 17, [0210]).

10. In the claim 24, Sanchez discloses the request comprises an Internet Group Management Protocol (IGMP) request message (see page 17, [0210]).

11. In the claim 27, claim 27 is rejected the same reason of claim 9 above.

12. In the claim 37, claim 37 is rejected the same reason of claim 6 above.

13. In the claim 38, claim 38 is rejected the same reason of claim 9 above.

14. In the claim 44, claim 44 is rejected the same reason of claim 6 above.

15. In the claim 45, claim 45 is rejected the same reason of claim 9 above.

Claim Rejections - 35 USC § 103

Art Unit: 2616

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 2-5, 20-23, 35-36, 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Sanchez – Kristofek - Daniel) in view of Pankajakshan et al. (U.S. 7,191,332 B1).

In the claim 2, the combined system (Sanchez – Kristofek - Daniel) discloses the limitations of claim 1 above.

However, the combined system (Sanchez – Kristofek - Daniel) are silent to disclosing the overlay network comprises at least one synchronous optical network (SONET) ring.

Pankajakshan et al. discloses the overlay network comprises at least one synchronous optical network (SONET) ring (see figure 3, SONET Ring 55).

Both Sanchez, Kristofek, Daniel and Pankajakshan disclose establishing a data connection between the remote management unit and the remote access function. Christian recognizes the SONET ring comprising an ingress Add-Drop multiplexer (ADM) and egress Add-Drop multiplexer (ADM). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek) with the teaching of Pankajakshan to provide the SONET ring

comprising an ingress Add-Drop multiplexer (ADM) and egress Add-Drop multiplexer (ADM) in order to control the set-up and functionality of either directly connected or remote peripheral equipment within SONET/SDH environment.

18. In the claim 3, the combined system (Sanchez – Kristofek - Daniel) discloses the limitations of claim 2 above.

However, the combined system (Sanchez – Kristofek - Daniel) are silent to disclosing the at least one SONET ring comprises an ingress add-drop multiplexer (ADM) to receive the broadcast traffic from the head-end network.

Pankajakshan discloses the SONET ring comprising an ingress Add-Drop multiplexer (ADM) (see figure 3, 56, 57, 58) and egress Add-Drop multiplexer (ADM) (see figure 3, 56,57,58) (see col. 5, lines 20-25).

Both Sanchez, Kristofek, Daniel and Pankajakshan disclose establishing a data connection between the remote management unit and the remote access function. Pankajakshan recognizes the SONET ring comprising an ingress Add-Drop multiplexer (ADM) and egress Add-Drop multiplexer (ADM). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek - Daniel) with the teaching of Pankajakshan to provide the SONET ring comprising an ingress Add-Drop multiplexer (ADM) and egress Add-Drop multiplexer (ADM) in order to control the set-up and functionality of either directly connected or remote peripheral equipment within SONET/SDH environment.

19. In the claim 4, the combined system (Sanchez – Kristofek - Daniel) discloses the limitations of claim 3 above.

However, the combined system (Sanchez – Kristofek - Daniel) are silent to disclosing the at least one SONET ring comprises a plurality of egress ADMs including an egress ADM connected to the network interface of the DSLAM.

Pankajakshan discloses the at least one SONET ring comprises a plurality of egress ADMs including an egress ADM (figure 3, 56, 57, 58) connected to the network interface of the DSLAM (figure 3, 56, 57, 58) (see col. 5, lines 20-25).

Both Sanchez, Kristofek, Daniel and Pankajakshan disclose establishing a data connection between the remote management unit and the remote access function. Pankajakshan recognizes the at least one SONET ring comprises a plurality of egress ADMs including an egress ADM connected to the network interface of the DSLAM. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek - Daniel) with the teaching of Pankajakshan to provide the at least one SONET ring comprises a plurality of egress ADMs including an egress ADM connected to the network interface of the DSLAM in order to control the set-up and functionally of either directly connected or remote peripheral equipment within SONET/SDH environment.

20. In the claim 20, claim 20 is rejected the same reason of claim 2 above.
21. In the claim 21, claim 21 is rejected the same reason of claim 3 above.
22. In the claim 22, claim 22 is rejected the same reason of claim 4 above.
23. In the claim 35, claim 35 is rejected the same reason of claim 2 above.
24. In the claim 36, claim 36 is rejected the same reason of claim 3 above.
25. In the claim 42, claim 42 is rejected the same reason of claim 2 above.

26. In the claim 43, claim 43 is rejected the same reason of claim 3 above.

27. In the claim 5, Daniel et al. (6,992,975) discloses first network ring and the second network ring comprise SONET rings connected by the at least one cross connect element.

However, Daniel et al. is silent to disclosing the first network ring includes the ingress ADM and the second network including the egress ADM connected to the network interface of the DSLAM

Pankajakshan discloses the at least one SONET ring includes the ingress ADM (figure 3, 56, 57, 58), the egress ADM (figure 3, 56, 57, 58) connected to the network interface of the DSLAM (col. 5, lines 13-25)

Both Sanchez, Kristofek, Daniel, and Pankajakshan disclose broadcast video (or audio) programs). Pankajakshan recognizes the first network ring includes the ingress ADM and the second network including the egress ADM connected to the network interface of the DSLAM. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek – Daniel) with the teaching of Pankajakshan to provide the at least one SONET ring comprises a plurality of SONET rings connected by at least one cross connect element, the plurality of SONET rings comprising a first SONET ring and a second SONET ring in order to deliver of digital aggregated content bundle to subscribers in multiple markets via closed wide area network derived from available fiber optic assets.

28. In the claim 23, claim 23 is rejected the same reason of claim 5 above.

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 10, 14, 28, 32, 39, 40, 41, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Sanchez – Kristofed -Daniel) in view of Nguyen et al. (U.S.Patent No. 2004/0117503 A1) .

In the claim 10, Sanchez discloses the DSLAM is further to receive, from customer premise via the line interface, a request for a destination in the head-end network, and to deliver the request to a legacy xDSL data network (see page 17, [0210]).

However, the combined system (Sanchez – Kristofek - Daniel) are silent to disclosing a unicast request for a destination in the head-end network, and to deliver the unicast request to a legacy xDSL data network.

Nguyen discloses where the DSLAM is further to receive, from the customer premise, a unicast request for a destination in the head-end network, and to deliver the unicast request to a legacy xDSL data network (see figure 2, page 2, [0021], the STB 1 sends the DSLAM a Group Join message requesting to join the multicast group for channel 1);

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek - Daniel) with the teaching of Nguyen to provide a unicast request for a destination in the head-end network, and to deliver the unicast request to a legacy xDSL data network in order to provide video information such as television programs or movies, audio programs and text based information streams.

- 31. In the claim 14, claim 14 is rejected the same reason of claim 10 above.
- 32. In the claim 28, claim 28 is rejected the same reason of claim 10 above.
- 33. In the claim 32, claim 32 is rejected the same reason of claim 10 above.
- 34. In the claim 39, claim 39 is rejected the same reason of claim 10 above.
- 35. In the claim 40, claim 40 is rejected the same reason of claim 10 above.
- 36. In the claim 41, claim 41 is rejected the same reason of claim 10 above.
- 37. In the claim 46, claim 46 is rejected the same reason of claim 10 above.

Claim Rejections - 35 USC § 103

- 38. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

39. Claims 11, 12, 15, 16, 29, 30, 33, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Sanchez – Kristofek - Daniel) in view of Pankajakshan (U.S. Patent No. 7,191,332).

In the claim 11, the combined system (Sanchez – Kristofek) discloses wherein the DSLAM is further to receive, from the customer premise via the line interface, a unicast request for a destination in the head-end network, and deliver the unicast request to a dedicated data network.

However, the combined system (Sanchez – Kristofek - Daniel) are silent to disclosing a dedicated data network separate from the broadcast overlay network and separate from a legacy xDSL data network.

Pankajakshan discloses dedicated data network separate from the broadcast overlay network and separate from a legacy xDSL data network (figure 3, col.5, lines 13-25).

Both Sanchez, Kristofek, Daniel and Pankajakshan disclose broadcast video (or audio) programs). Pankajakshan recognizes dedicated data network separate from the broadcast overlay network and separate from a legacy xDSL data network. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek - Daniel) with the teaching of Pankajakshan to provide dedicated data network separate from the broadcast overlay network and separate from a legacy xDSL data network in order to deliver of digital aggregated content bundle to subscribers in multiple markets via closed wide area network derived from available fiber optic assets.

40. In the claim 12, the combined system (Sanchez – Kristofek - Daniel) discloses the limitations of claim 11 above.

However, the combined system (Sanchez – Kristofek - Daniel) are silent to disclosing the dedicated data network comprises a virtual private network (VPN).

Pankajakshan discloses the dedicated data network comprises a virtual private network (figure 3, figure 4, claim 12, The system of claim 1 further comprising: an auxiliary distribution point; and a distribution tunnel comprised of a virtual private network coupled between said multicast server and said auxiliary distribution point.)

Both Sanchez , Kristofek, Daniel and Pankajakshan disclose broadcast video (or audio) programs). Kenworthy recognizes the dedicated data network comprises a virtual private network (VPN). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek - Daniel) with the teaching of Pankajakshan to provide the dedicated data network comprises a virtual private network (VPN) in order to deliver of digital aggregated content bundle to subscribers in multiple markets via closed wide area network derived from available fiber optic assets.

41. In the claim 15, the combined system (Sanchez – Kristofek - Daniel) discloses the DSLAM is to receive the unicast traffic (see Sanchez, page 17, [0210] a video head end provides statistically configured channels to DSL access multiplexer (DSLAM).

However, the combined system (Sanchez – Kristofek - Daniel) are silent to disclosing the DSLAM is to receive the unicast traffic via a legacy xDSL data network.

Pankajakshan discloses DSLAM is to receive the unicast traffic via a legacy xDSL data network (see figure 3, col. 5, lines 13-25).

Both Sanchez, Kristofek, Daniel, and Pankajakshan disclose broadcast video (or audio) programs). Pankajakshan recognizes DSLAM is to receive the unicast traffic via a legacy xDSL data network. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek - Daniel) with the teaching of Pankajakshan to provide DSLAM is to receive the unicast traffic via a legacy xDSL data network in order to deliver of digital aggregated content bundle to subscribers in multiple markets via closed wide area network derived from available fiber optic assets.

- 42. In the claim 16, claim 16 is rejected the same reason of claim 12 above.
- 43. In the claim 29, claim 29 is rejected the same reason of claim 11 above.
- 44. In the claim 30, claim 30 is rejected the same reason of claim 12 above.
- 45. In the claim 33, claim 33 is rejected the same reason of claim 15 above.
- 46. In the claim 34, claim 34 is rejected the same reason of claim 16 above.

Claim Rejections - 35 USC § 103

- 47. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

48. Claims 13, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Sanchez – Kristofek - Daniel) in view of Pankajakshan (U.S. Patent No. 7,191,332).

In the claim 13, the combined system (Sanchez – Kristofek - Daniel) discloses the limitations of claim 8 above.

However, the combined system (Sanchez – Kristofek) is silent to disclosing the dedicated data network separate from the broadcast overlay network and the legacy xDSL data network.

Pankajakshan discloses wherein the DSLAM is further adaptive to receive a unicast request from the customer premise for a destination in the head-end network, and to deliver the unicast request to one or a legacy xDSL (figure 3) data network and a dedicated data network based on a policy decision, the dedicated data network separate from the broadcast overlay network and the legacy xDSL data network (For serving users who cannot receive multicast traffic, a multicast-to-unicast gateway 100 is coupled to backbone 96. Non-multicast-enabled DSLAM's 101 and 102 are connected to gateway 100 and to users 103 and 104, respectively. Gateway 100 may be comprised of a Unisphere 1400 ERX edge router available from Juniper Networks, Inc., for example, to provide a unicast tunnel to the multicast stream from backbone 96. Alternatively, gateway 100 could be replaced with a multicast address resolution server (MARS) creating a permanent virtual circuit (PVC) to end users 103 and 104. Proposed IETF standards based on switched virtual circuit (SVC) and MARS could also be used)

the dedicated data network (fig.3, col. 5, lines 13-25) separate from the broadcast overlay network (fig.3) and the legacy xDSL data network (fig.3, 40, (DSLAM))

Both Sanchez, Kristofek, Daniel and Pankajakshan disclose broadcast video (or audio) programs). Pankajakshan recognizes dedicated data network separate from the broadcast overlay network and separate from a legacy xDSL data network. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Sanchez – Kristofek) with the teaching of Pankajakshan to provide dedicated data network separate from the broadcast overlay network and separate from a legacy xDSL data network in order to deliver of digital aggregated content bundle to subscribers in multiple markets via closed wide area network derived from available fiber optic assets.

49. In the claim 31, claim 31 is rejected the same reason of claim 13 above.

Allowable Subject Matter

50. Claims 17-18 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art (20040117503, 20040088735, 20040090970, 6992975, 7191332) of record does not appear to teach or render obvious the claimed limitations in combinations with the specific added limitations, as recited from independent claim 17: "a digital subscriber line access multiplexer (DSLAM) having a line interface and a network interface, the network interface in communication with one of the egress ADMs of the second SONET ring, the DSLAM to receive an Internet Group Management Protocol (IGMP) request message for a particular video channel from a customer premise via the line interface to

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determine an available of the particular video channel based on at least one of a group address and a class-D Internet Protocol (IP) address provided by the IGMP request, and to deliver the particular video channel from the network interface to the line interface”.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

51. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/23/07

A handwritten signature in black ink, appearing to read 'Huy D. Vu', with a long horizontal line extending to the right.

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600